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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/698,126	10/31/2003	Arup Acharya	590.116	8951
35195 7590 03/04/2009 FERENCE & ASSOCIATES LLC 409 BROAD STREET PITTSBURGH, PA 15143				
EXAMINER SIKRI, ANISH				
ART UNIT 2443		PAPER NUMBER		
MAIL DATE 03/04/2009		DELIVERY MODE PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Office Action Summary****Application No.**

10/698,126

**Applicant(s)**

ACHARYA ET AL.

**Examiner**

ANISH SIKRI

**Art Unit**

2443

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/5508)
- 4) ☐ Interview Summary (PTO-413)
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_
- Paper No(s)/Mail Date \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1 to 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Myers et al (US Pub 2003/0079005) hereafter known as Myers, and in view of Anerousis et al (US Pub 2004/0210670) hereafter known as Anerousis.

Consider Claim 1, Myers discloses the method comprising the steps of: utilizing a general purpose computer for network route control (Myers, Fig 5, [0046], [0062], Myers discloses that a general purpose computer/node is used for network route control as it also contains routing optimizing software, Myers disclosed on how the nodes of the overlay are arranged. Further support in Myers can be seen in [0098], on how nodes use the optimum route). And establishing a connection between said general purpose computer and arrangement for linking said computer to multiple internet service providers (Myers, [0050], Myers disclosed on how the nodes can be connected different multiple providers of the network). And the making a routing control decision at said

general purpose computer prior to sending a packet comprising network traffic (Myers [0091], Myers disclosed that the each node maintains information about the best routes available, And in Myers [0098] Myers discloses on how nodes use the optimum route); and to direct the packet to an outgoing link (Myers, [0098], Myers disclosed the selection of optimum routes before data is sent), measuring relevant performance metrics of said links (Myers, [0098], Myers discloses on how performance and metrics are measured by the nodes).

But Myers does not explicitly disclose the use of availability metrics.

Nonetheless, Anerousis discloses the use of availability metrics (Anerousis, [0019], Anerousis discloses on the use of availability metrics which indicate which host/node is most appropriate to handle request from other nodes, thus indicating availability).

Both Myers-Anerousis provide features related to routing optimization. Therefore one of ordinary skill in the art would have been motivated to combine the teachings since both are within the same environment.

Therefore, it would be obvious to a person skilled in the art at the time of the invention was made to make use of availability metrics, in the system of Myers for the purpose of efficient management of routing between the nodes of the network.

Consider Claim 2, and as applied to claim 1 above, Myers-Anerousis disclosed the method wherein the said connection is accomplished through Multi-protocol Label Switching (MPLS) switched paths (Anerousis [0075], Anerousis et al clearly shows on

the use of the method of incorporating the use of MPLS paths for implementing in IP tunnels).

Consider Claim 3, and as applied to claim 1 above, Myers-Anerousis disclosed the method wherein the said connection is accomplished through Virtual Local Area Network (VLAN) tunnels (Anerousis [0096], Anerousis clearly shows on the use of the method incorporating the use of VLAN for implementing in IP tunnels).

Consider Claim 4, and as applied to claim 1 above, Myers-Anerousis disclosed the method wherein the said connection is accomplished using Internet protocol (IP)-level tunnels (Anerousis [0045], Anerousis clearly shows on the use of the method of incorporating IP tunnels on the network).

Consider Claim 5, and as applied to claim 1 above, Myers-Anerousis disclosed the method wherein the relevant performance and availability metric is network delay (Anerosis [0064], [0106], [0123], Anerousis clearly shows on the use of the method involving the metric - network delay, as it shows how it affects or improves the communication on the network).

Consider Claim 6, and as applied to claim 1 above, Myers-Anerousis disclosed the method wherein the relevant performance and availability metric is network loss (Anerosis [0064], [0106], [0123], Anerousis clearly shows on the use of the method

involving the metric – network loss, as it shows how it affects or improves the communication on the network).

Consider Claim 7, and as applied to claim 1 above Myers-Anerousis disclosed the method wherein the relevant performance and availability metric is network throughput (Anerosis [0064], [0106], [0123], Anerousis clearly shows on the use of the method involving the metric – network throughput, as it shows how it affects or improves the communication on the network).

Consider Claim 8, and as applied to claim 1 above, Myers-Anerousis disclosed the method wherein the relevant performance and availability metric is application-layer response time (Anerosis [0064], [0106], [0123], Anerousis clearly shows on the use of the method involving the metric – response time, as it shows how it affects or improves the communication on the network).

Consider Claim 9, and as applied to claim 1 above Myers-Anerousis disclosed wherein the step of measuring relevant performance and availability metrics comprises making passive measurements (Myers, [0064], Myers indicates that passive measurements are carried out as the metrics are saved, and calculations are performed afterwards indicating optimum route), wherein the general purpose computer utilizes applications running on the general purpose computer to measure the relevant performance metrics in an application-specific manner (Myers, [0062], Myers discloses

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that a general purpose computer/node is used for network route control as it also contains routing optimizing software).



Claim 10, has similar limitations as Claim 1, therefore it is rejected under the same rational as Claim 1.

Claim 11, has similar limitations as Claim 2, therefore it is rejected under the same rational as Claim 2.

Claim 12, has similar limitations as Claim 3, therefore it is rejected under the same rational as Claim 3.

Claim 13, has similar limitations as Claim 4, therefore it is rejected under the same rational as Claim 4.

Claim 14, has similar limitations as Claim 5, therefore it is rejected under the same rational as Claim 5.

Claim 15, has similar limitations as Claim 6, therefore it is rejected under the same rational as Claim 6.

Claim 16, has similar limitations as Claim 7, therefore it is rejected under the same rational as Claim 7.

Claim 17, has similar limitations as Claim 8, therefore it is rejected under the same rational as Claim 8.

Claim 18, has similar limitations as Claim 9, therefore it is rejected under the same rational as Claim 9.

Claim 19, has similar limitations as Claim 1, therefore it is rejected under the same rational as Claim 1.

Consider Claim 20, and as applied to claim 1 above Myers-Anerousis disclosed the method wherein a label is utilized to direct the packet to a best link (Myers, [0096]-[0097], Myers disclosed on how the best link is selected).

### ***Response to Arguments***

Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANISH SIKRI whose telephone number is 571-270-1783. The examiner can normally be reached on 8am - 5pm Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on 571-272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Anish Sikri  
a.s.

Feb 26, 2009

/Tonia LM Dollinger/  
Supervisory Patent Examiner, Art Unit 2443

